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Indian Standard

PHOTOGRAPHY – OVERHEAD PROJECTORS

PART 2 TRANSPARENCIES AND TRANSPARENCY FRAMES — DIMENSIONS

UDC 778·274 : 371·686

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BUREAU OF INDIAN STANDARDS
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Indian Standard

PHOTOGRAPHY – OVERHEAD PROJECTORS

PART 2 TRANSPARENCIES AND TRANSPARENCY FRAMES — DIMENSIONS

NATIONAL FOREWORD

This Indian Standard, which is identical with ISO 7943 - 2 : 1987 'Photography — Overhead projectors — Part 2 : Transparencies and transparency frames — Dimensions', issued by the International Organization for Standardization (ISO), was adopted by the Bureau of Indian Standards on 8 May 1990 on the recommendation of the Optical and Mathematical Instruments Sectional Committee (LMD 20) and approval of the Light Mechanical Engineering Division Council.

The text of the ISO Standard has been approved as suitable for publication as Indian Standard without deviations. Certain terminology and conventions, however, are not identical to those used in Indian Standards. Attention is particularly drawn to the following :

a) Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as decimal marker while in Indian Standards the current practice is to use point (.) as the decimal marker.

CROSS REFERENCES

In this Indian Standard, the following International Standards are referred to. Read in their place the following:

International Standard	*Corresponding Indian Standard*	*Degree of Correspondence*
ISO 216 : 1977 Writing paper and certain classes of printed matter — Trimmed sizes — A and B series	IS 1064 : 1980 Paper sizes (*second revision*)	Identical
ISO 7943 - 1 : 1987 Photography — Overhead projectors — Part 1 : Projection stages — Dimensions	IS 13011 (Part 1) : 1990 Photography — Overhead projectors : Part 1 Projection stages — Dimensions	Identical
ISO 7943 - 3 : 1987 Photography — Overhead projectors — Part 3 : Film rolls, cores and winders — Dimensions	IS 13011 (Part 2) : 1990 Photography — Overhead projectors : Part 3 Film rolls, cores and winders — Dimensions	Identical

The technical committee responsible for the preparation of this standard has reviewed the provisions of ISO 7830 : 1983 'Photography — Safety photographic films other than motion-picture films — Material specification' and has decided that this is acceptable for use in conjunction which this standard.

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0 Introduction

ISO 7943 consists of the following parts:

Part 1 : Projection stages — Dimensions.

Part 2 : Transparencies and transparency frames — Dimensions.

Part 3 : Film rolls, cores and winders — Dimensions.

Two types of overhead projector are specified in ISO 7943-1, i.e. type A (250 mm × 250 mm) and type B (285 mm × 285 mm); the significant difference between them being the dimensions of the picture area.

ISO 7943-3 specifies the dimensions of cores of film rolls including the key-ways in the ends of the cores and the maximum overall diameter of film rolls.

1 Scope and field of application

This part of ISO 7943 specifies the film type for transparencies and the dimensions of mounted and unmounted transparencies, including transparency frames, in order to ensure compatibility between overhead projectors and the transparencies within each type of overhead projector system (type A and type B).

There is some degree of interchangeability of transparencies between projectors of type A and type B.

2 References

ISO 216, *Writing paper and certain classes of printed matter — Trimmed sizes — A and B series.*

ISO 7830, *Photography — Safety photographic films other than motion-picture films — Material specifications.*

ISO 7943, *Photography — Overhead projectors —*

Part 1 : Projection stages — Dimensions.

Part 3 : Film rolls, cores and winders — Dimensions.

3 Definitions

For the purpose of this part of ISO 7943 the following definitions apply.

3.1 film : The transparent material used for transparencies.

NOTE — Film may be in either sheet or roll form.

3.2 transparency: The general term used for film carrying an image for projection by an overhead projector.

3.3 information area: That part of a transparency which contains the image or images for projection.

3.4 transparency frame: The frame for mounting (or supporting) a transparency, which includes a mask opening.

3.5 location holes: Holes in the transparency frame or unmounted transparency which fit the location pins on the projection stage of an overhead projector to position transparencies.

4 Film for transparencies

4.1 All film used for overhead projector transparencies shall be safety film conforming to ISO 7830.

4.2 Sheet film

The dimensions of sheet film shall be as given in table 1.

Table 1 — Sheet film — Designation and dimensions

Dimensions in millimetres

Designation	Dimensions
S1	216 × 267 ± 2,0
S2	216 × 279 ± 2,0
S3*	210 × 297 ± 2,0
S4	297 × 297 ± 3,0

* A4 size as specified in ISO 216.

4.3 Film for rolls

The width of film for rolls shall be as given in table 2.

Table 2 — Roll film — Designation and width

Dimensions in millimetres

Designation	Width of film
R1	250^{+10}_{0} (for type A overhead projector)
R2	285^{+10}_{0} (for type B overhead projector)

5 Sheet transparencies

Sheet transparencies may be used unmounted or mounted.

5.1 The outer dimensions of unmounted transparencies shall correspond to the dimensions of the film given in table 1.

5.2 The information area of unmounted transparencies shall not exceed the minimum dimensions of the picture area of the type of projector, A or B, for which the transparency is intended (see ISO 7943-1).

5.3 The dimensions and locations of location holes shall be as shown in figures 1 and 2 for S3 and S4 sheet films respectively.

5.4 The information areas on sheet films S3 and S4 shall be centred as shown in figures 1 and 2 respectively.

6 Transparency frames

6.1 Mounted transparencies shall have a frame the dimensions of which are specified in 6.3.

6.2 The provision of a field is recommended on the transparency frame in which data may be printed or written, for example title of transparency, author, reference number.

6.3 Transparency frames types A1, A2, B1, B2 and C shall comply with the dimensions shown in figures 3, 4, 5, 6 and 7 respectively and in table 3.

Table 3 — Transparency frames — Designations and mask dimensions

Dimensions in millimetres

Designation	Nominal mask opening size	Mask aperture	
		Dimensions	Corner cut
A1	250 × 250	247 × 247 ± 2,0	60 ± 2,5 (radius)
A2	200 × 250	195 × 247 ± 2,0	15 ± 2,5 (radius)
B1	285 × 285	280 × 280 ± 2,0	40 × 40 ± 1,0 (diagonal) or 40^{0}_{-2} (radius)
B2	200 × 285	195 × 280 ± 2,0	15 ± 2,5 (radius)
C	180 × 240	180 × 240 ± 1,0	13 max. (radius)

NOTE — The transparency frame type C is primarily used in the USA.

Dimensions in millimetres

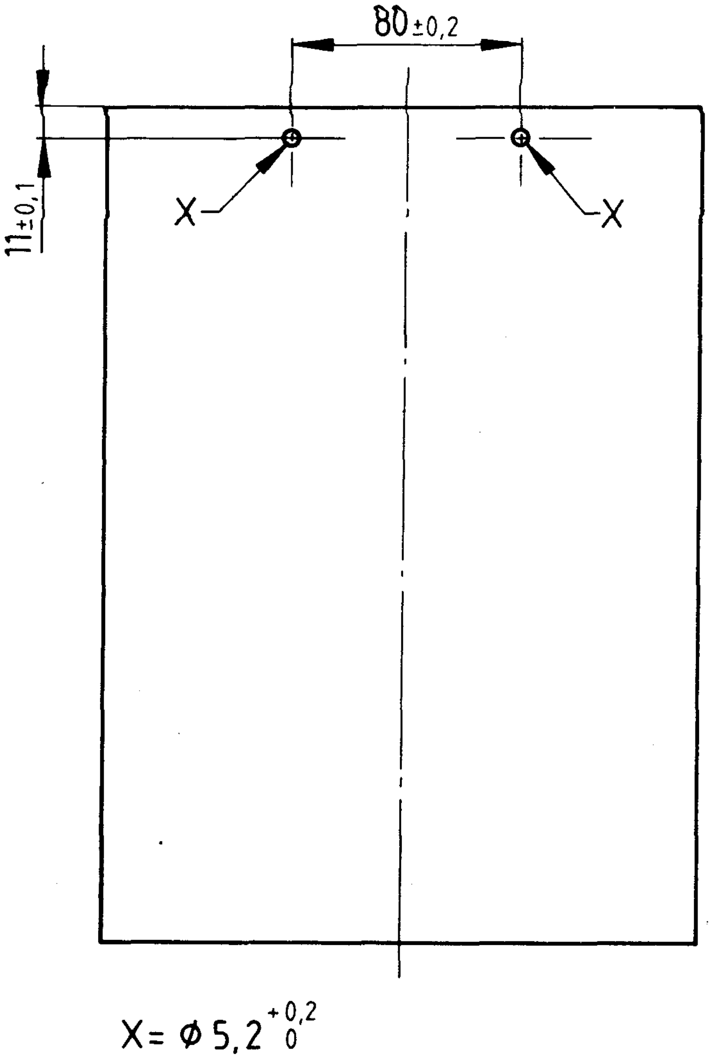


Figure 1 — Sheet film S3 (210 mm × 297 mm) — Dimensions and positions of location holes and centre-line of information area

Dimensions in millimetres

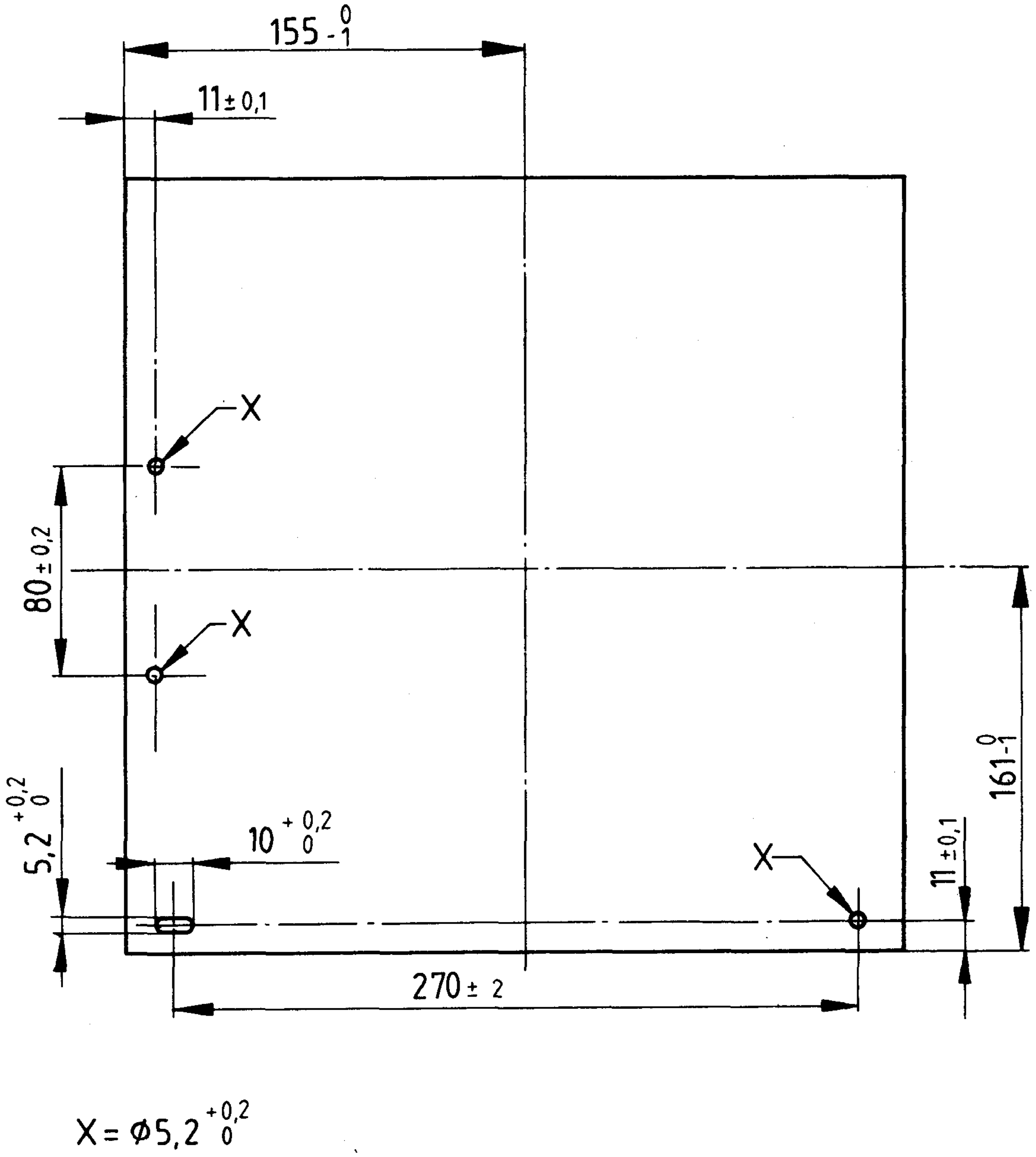
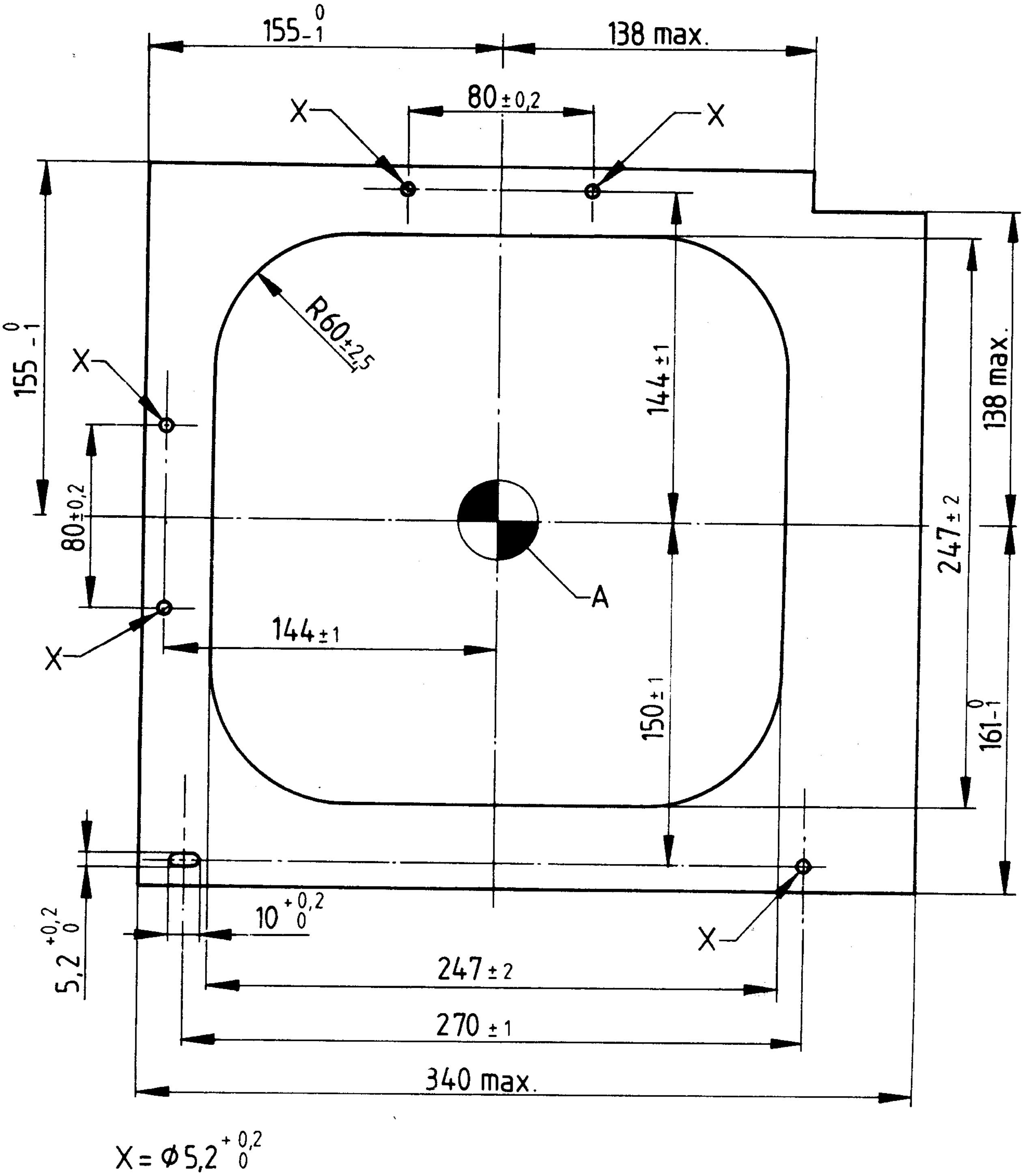


Figure 2 — Sheet film S4 (297 mm × 297 mm) — Dimensions and positions of location holes and centre-lines of information area

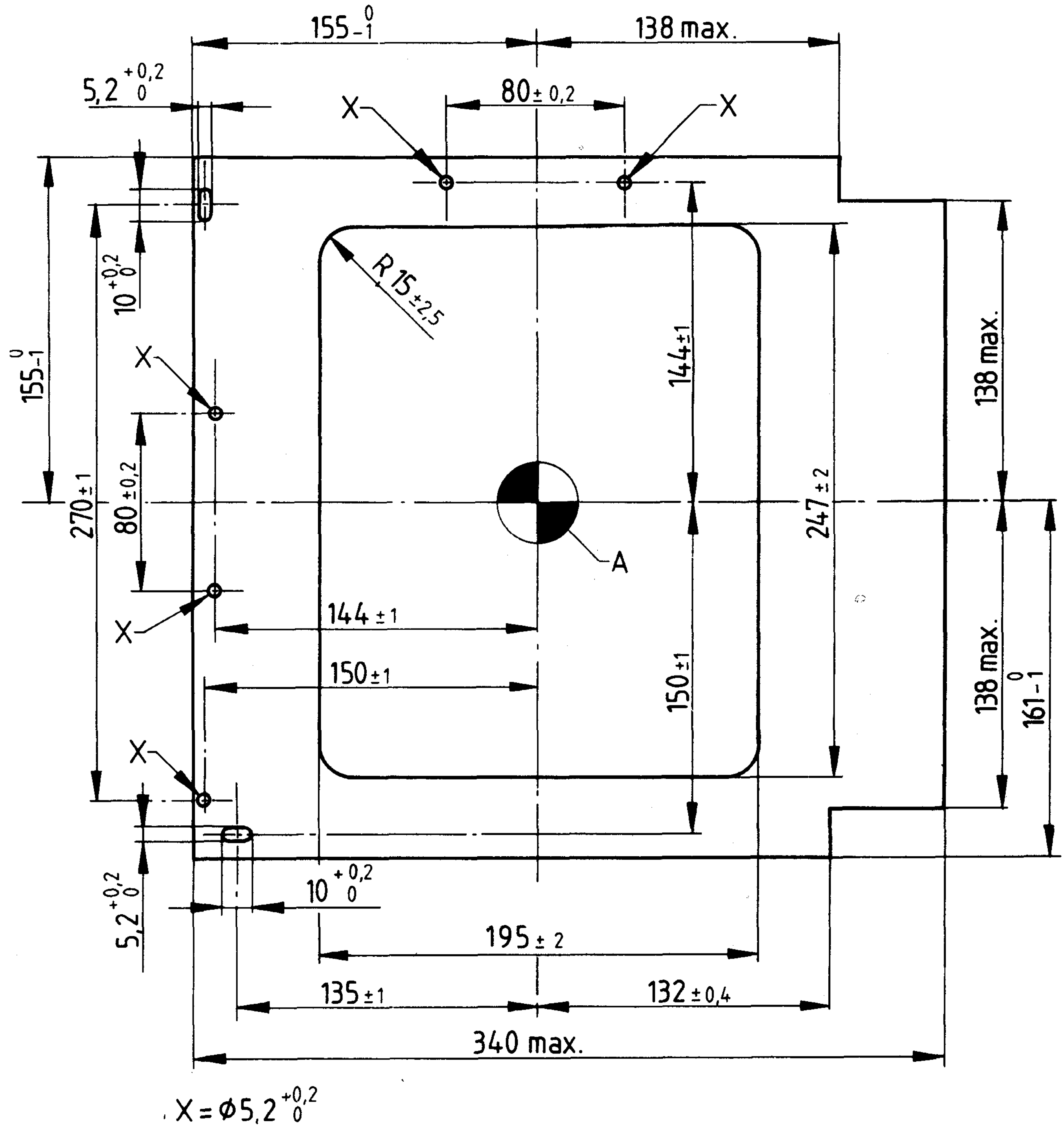
Dimensions in millimetres



NOTE — A is the optical centre of the frame mask opening.

Figure 3 — Transparency frame type A1

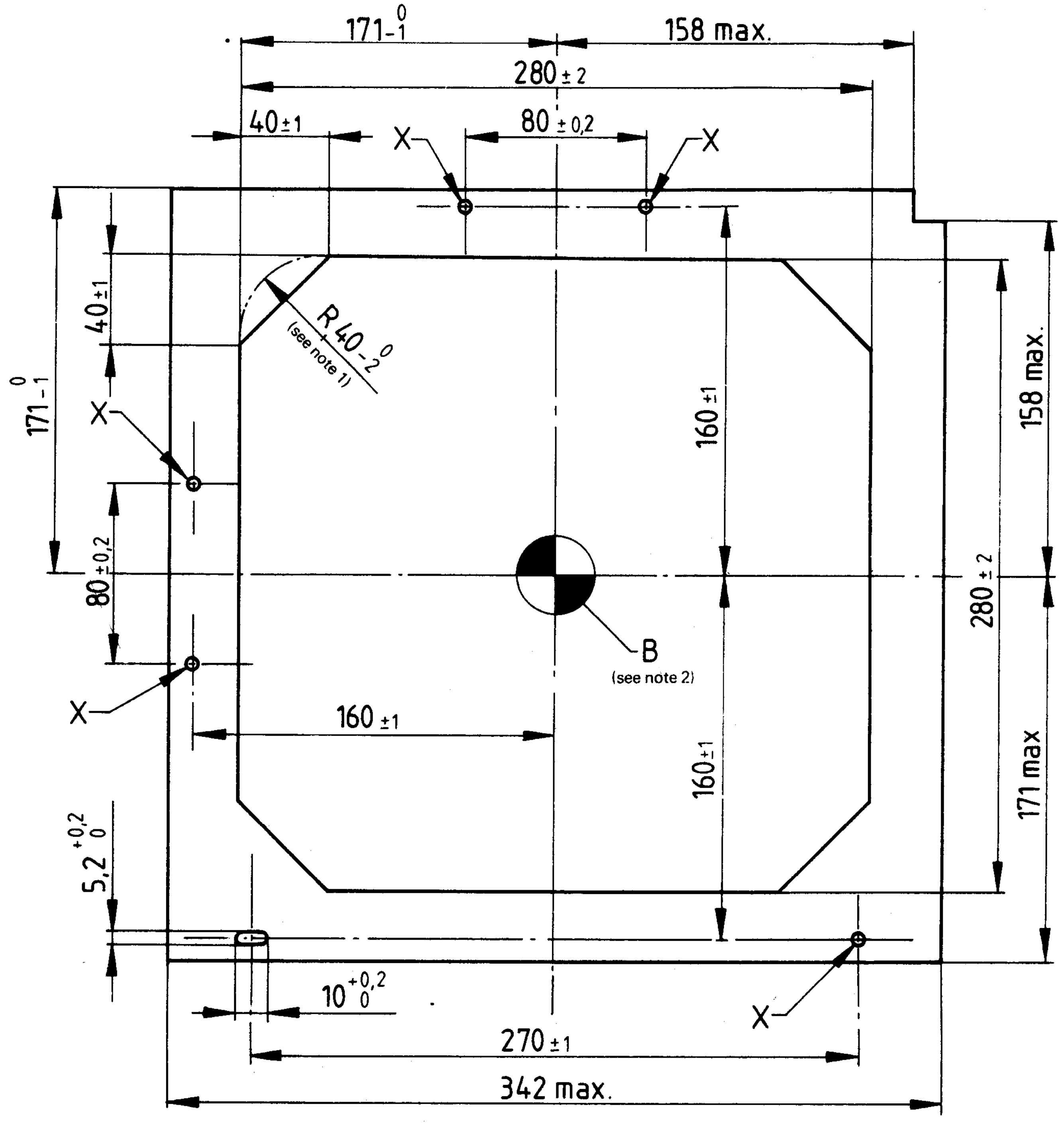
Dimensions in millimetres



NOTE — A is the optical centre of the frame mask opening.

Figure 4 — Transparency frame type A2.

Dimensions in millimetres



$X = \phi 5{,}2_{0}^{+0{,}2}$

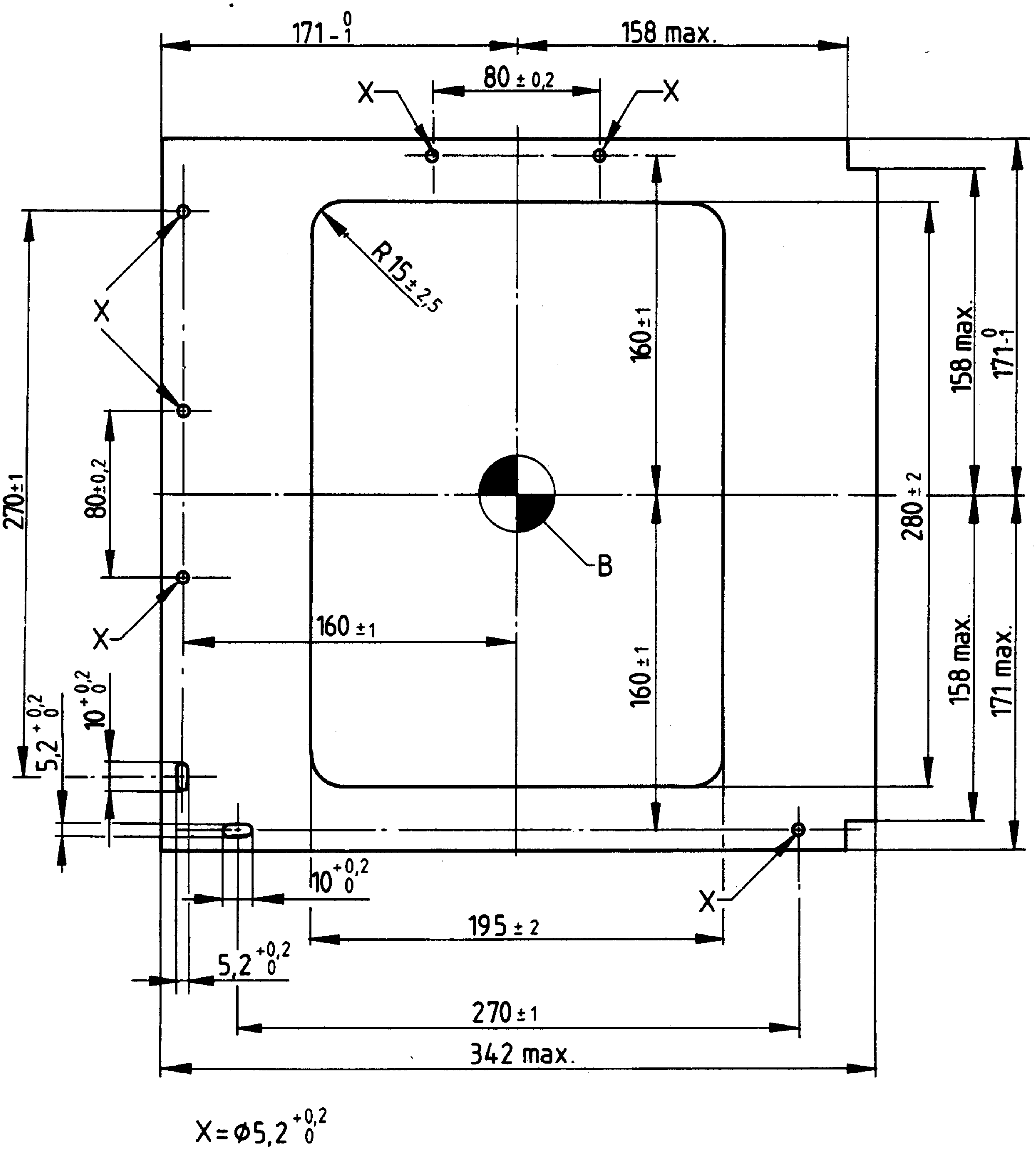
NOTES

1 Radius corner is optional.

2 B is the optical centre of the frame mask opening.

Figure 5 — Transp ...ne type B1

Dimensions in millimetres



NOTE — B is the optical centre of the frame mask opening

Figure 6 — Transparency frame type B2

Dimensions in millimetres

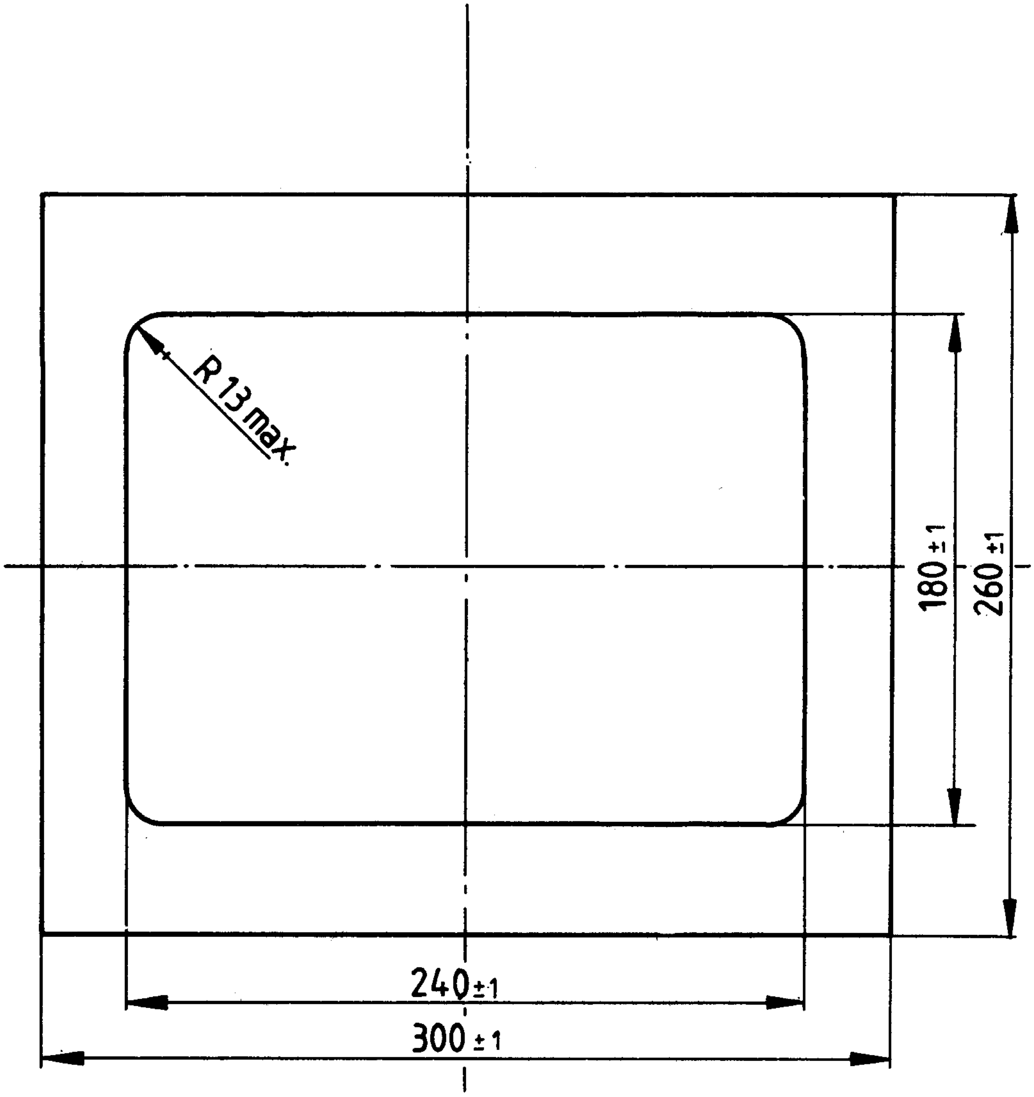


Figure 7 — Transparency frame type C

Annex

Overlay transparencies

(This annex does not form part of the standard)

A.1 Sets of overlay transparencies may be unmounted or mounted. However, to aid accurate registration it is recommended that unmounted transparencies should be on S3 or S4 sheet film with location holes, and that mounted transparencies of one set should be on the same transparency frame.

A.2 The base transparency of an overlay set and subsequent transparencies of an overlay sequence should be marked with a number on the lower or right-hand edge to indicate the correct sequence. An additional note is recommended to show how many transparencies are in the set.

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